

## AMENDMENTS TO THE CLAIMS

**Claim 1 (Currently Amended)** A method for manufacturing a printed wiring board, including the steps of: forming a thermosetting resin layer so as to fill spaces between circuit patterns formed on a surface of the printed wiring board; heating and curing the resin layer in a ~~reduced pressure chamber in which a pressure is reduced, while a smoothing plate is pressed against the resin layer~~; and then polishing said cured resin layer covering said circuit patterns, thereby exposing said circuit ~~patterns~~,  
—— patterns, wherein said step of heating and curing said resin layer comprises in said reduced pressure chamber, comprising the following steps being successively performed:  
maintaining said resin layer at a non-curable temperature ~~to prevent the resin layer from curing in a state where said resin layer is pressed via a said smoothing plate in a said reduced pressure environment chamber~~ (step 1);  
heating said resin layer in said pressed state to a curing temperature at which said resin layer is cured (step 2);  
introducing outside air to eliminate into said reduced pressure environment while maintaining chamber with said pressed state and said curing temperature maintained (step 3);  
reducing the pressure applied to said smoothing plate while maintaining with said curing temperature maintained (step 4); and  
cooling said resin layer (step 5).

**Claim 2 (Currently Amended)** The method for manufacturing a printed wiring board according to claim 1, wherein in said step 1, the applied pressure of the smoothing plate is increased in ~~stages~~ predetermined steps.

**Claim 3 (Currently Amended)** The method for manufacturing a printed wiring board according to claim 1 ~~or claim 2~~, wherein said resin layer is formed by adhereing ~~having a liquid resin adhere to~~ said printed wiring board so as to fill spaces between said circuit patterns, and wherein a metallic foil with a roughened surface facing said resin layer is superposed on the resin layer.

**Claim 4 (Currently Amended)** The method for manufacturing a printed wiring board according to claim 1 ~~or claim 2~~, wherein said resin layer is formed by superposing ~~having a semi-cured resin sheet superposed on the printed wiring board~~, and wherein a metallic foil with a roughened surface facing said resin layer is superposed on the resin layer.

**Claim 5 (Currently Amended)** The method for manufacturing a printed wiring board according to claim 3 ~~or claim 4~~, wherein said metallic foil is formed with a metal of a different type of metal than ~~kind from~~ said circuit patterns.

**Claim 6 (New)** The method for manufacturing a printed wiring board according to claim 4, wherein said metallic foil is formed with a different type of metal than said circuit patterns.

**Claim 7 (New)** The method for manufacturing a printed wiring board according to claim 1 wherein said reduced pressure environment is provided by a reduced pressure chamber.

**Claim 8 (New)** The method for manufacturing a printed wiring board according to claim 1, wherein said resin layer is formed by adhering a liquid resin to said printed wiring board so as to fill spaces between said circuit patterns, and wherein a metallic foil with a roughened surface facing said resin layer is superposed on the resin layer.

**Claim 9 (New)** The method for manufacturing a printed wiring board according to claim 8, wherein said metallic foil is formed with a different type of metal than said circuit patterns.

**Claim 10 (New)** The method for manufacturing a printed wiring board according to claim 2, wherein said resin layer is formed by superposing a semi-cured resin sheet on the printed wiring board, and wherein a metallic foil with a roughened surface facing said resin layer is superposed on the resin layer.

**Claim 11 (New)** The method for manufacturing a printed wiring board according to claim 10, wherein said metallic foil is formed with a different type of metal than said circuit patterns.

**Claim 12 (New)** A method for manufacturing a printed wiring board including a resin layer filling spaces between and upon circuit patterns formed on a surface of the printed wiring board where the heating and curing of the resin layer includes the following steps:

- pressing said resin layer via a smoothing plate in a reduced pressure chamber while maintaining said resin layer at a non-curable temperature and a reduced pressure environment;

- heating said resin layer at a curing temperature while maintaining the pressing state and the reduced pressure environment;

- eliminating reduced pressure environment by allowing air to enter the reduced pressure chamber while maintaining the pressing state and the curing temperature;

- reducing the pressure applied to said resin layer via the smoothing plate while maintaining the curing temperature;

- cooling the resin layer; and

- polishing the resin layer to expose the circuit patterns.

**Claim 13 (New)** The method for manufacturing a printed wiring board according to claim 12, wherein the pressure applied to the resin layer via the smoothing plate increased in incremental stages.

**Claim 14 (New)** The method for manufacturing a printed wiring board according to claim 12, wherein a metallic foil with a roughed surface facing said resin layer is superposed on the resin layer and wherein the metallic foil is removed prior to polishing the resin layer.

**Claim 15 (New)** The method for manufacturing a printed wiring board according to claim 14, wherein the metallic foil is formed with a different type of material than the circuit patterns.

**Claim 16 (New)** The method for manufacturing a printed wiring board according to claim 14, wherein the resin layer is a semi-cured thermosetting resin sheet superposed on the printed wiring board.

**Claim 17 (New)** The method for manufacturing a printed wiring board according to claim 14, wherein the resin layer is a liquid thermosetting resin adhered to the printed wiring board so as to fill in the spaces between the circuit patterns and to substantially cover the circuit patterns.

**Claim 18 (New)** A method for manufacturing a printed circuit board including:

- applying a resin layer via a coating method to a printed wiring board containing wiring patterns;
- superposing a metal foil over the resin layer and printed wiring board;
- applying pressure to the metal foil via a smoothing plate in a reduced pressure environment at a non-curing temperature of the resin;
- heating the resin layer at a curing temperature of the resin while maintaining the pressure applied to the metal foil and the reduced pressure environment;
- raising a pressure of the reduced pressure environment while maintaining the pressure applied to the metal foil and the curing temperature;
- reducing the pressure applied to the metal foil while maintaining the curing temperature;
- cooling the printed wiring board;
- removing the metal foil layer; and
- polishing the resin layer so as to expose the wiring patterns.

**Claim 19 (New)** The method for manufacturing a printed wiring board according to claim 18 wherein the pressure applied to the metal foil layer is increased in predetermined stages.